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Roof top garden play space

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Roof Top Garden Play Space



Karolyn Crutchfield

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Independent Study Paper
Submitted in partial fulfillment of the requirements of the degree of
Leadership in Technology and the Arts
Master of Science in Education
Bank Street College of Education / Graduate School - 2013

Abstract

Throughout this unit our kindergarten and first grade students have had hands on experiences with growing a variety of plants. The in depth exploration of plants, planting, gardens and nutrition provided concrete learning opportunities to observe, predict, collect and organize data, compare and contrast and develop a hypothesis. As students were exposed to the variety of plants through the garden project they were able to determine what plants needed to survive and flourish. Additionally, they focused on how plants help people, animals and insects and explored what effect plants have on the ecological balance of the earth.



I am proud to have been the catalyst for this work and I profusely thank the administration and my colleagues for their support and continued efforts. Additionally I want to recognize the many parents and family members who gave their support and took an active role in this unit at home and in school.

Roof Top Garden Play Space

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Introduction

“The principle goal of education in schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done.” Piaget (1896 – 1980).

I believe that it is most important to teach the whole child. The cognitive, social, emotional and physical needs. Piaget believed educators must plan a developmentally appropriate curriculum that enhances their students’ logical and conceptual growth. Curriculum should be designed around developmental stages; it should be centered around the child’s knowledge and interests. Students should have the opportunity to construct their own learning and the opportunity to document their work in a number of ways. Learning is an interactive process. It should be interdisciplinary because children do not learn in an isolated manner. Piaget suggests that teachers must emphasize the critical role that experiences or interactions with the surrounding environment play into student learning. For example, instructions must take into account the role that fundamental concepts, such as the permanence of objects, play in establishing cognitive structures.

The teacher acts only as a facilitator with the students. Classrooms and school environments can set the stage for success or can create necessary obstacles that negatively affect the child. The environment should be designed to support the multifaceted needs of children, and should support the curriculum and also support the teacher as well. Robert Starratt, (*“Leaders with Vision”*-1995, pg.5), believes that the principal is an agent of multiple constituencies. The state (to carry out policies and directives of the state in furthering the best education possible), the community (serving

the parents and attempting to nurture and educational environment that is responsive to the needs of their children.), and the educational professional (to promote the best professional practice in the school). We have not in all these years found a way to make a perfect school, however, we should always continue to refine, redefine, investigate and improve the systems in place today to create a better tomorrow for our children.



Finding volunteers to work after school was not a problem.

This thematic unit engaged a group of kindergarten and first grade students in planting seeds and using those seedlings to create a garden area on the roof of the elementary school building. I invited other teachers to use the garden in their curricula

and we had many classes involved with the maintenance and upkeep of the garden. Each class planted one item so that everyone would be included and feel part of this exercise. Piaget believed educators must plan a curriculum that enhances their students' logical and conceptual growth. We created a theme based project that included science, math, language arts and art. We enlisted the assistance of our parents and vendors asking them to donate some of the items needed as well as help with the planting and design of our garden.

Mike Metallo, president of the Nation Gardening Association says,

“No activity better links young people to food and nature than gardening. The garden experience bonds youngsters to the cycles of life and teaches them to understand where their food comes from. Is there any greater satisfaction – or greener activity – a child can experience than smelling a flower from his or her own garden, plucking a carrot from the ground, or digging new potatoes from warm soil? What can make parents happier than hearing their child tell them they want chard for dinner?”

I looked forward to having some of the produce used to “spice up” our lettuce and cucumber lunch salads with tomatoes and herbs. If all went well, I looked forward to creating an entrepreneurial program that would teach the students how to open a store that would service our school community. They would have the opportunity to stock the shelves, service the patrons, collect and count the money etc. Our intention is to teach them how to provide better nutrition to their community by selling produce to our parents.

A History of the School

The Community Charter School has been open for 15 good years. We have grown from five kindergarten rooms to 18 elementary classrooms for kindergarten through fifth grade and have added a second site housing our middle school classes, sixth through eighth grades. We are a public charter school located in N. J. Our principal was very forward thinking. She was always looking for new ways to broaden our curriculum and keep it fresh. It is very important to keep our students on their toes and thinking positively. The mission statement of the school is to provide each student with innovative learning experiences that develop positive intellectual, social and physical outcomes. Our thematic unit for September 2008 was the election process. The students did so well that we created a bonus: 25 students earned their way on a trip to the inauguration in Washington D.C. by producing exemplary class work concerning the election theme. It was magical! The work produced was amazing and the exhibit that followed was our best so far. We had guests come to visit from as far away as Kenya, East Africa. The Kenyan ambassador Ogego and his staff visited our exhibit. The students hosted a luncheon for the delegation after they had a tour of our two sites. The ambassador sent flowers from Kenya to all the parents of our graduates in June 2009 and he invited the staff to visit a school in his country.

We recently had construction done on our elementary building. We added 12 new classrooms, a block room, gymnasium, cafeteria, science lab, technology lab, library, reading room, art room, creative writing room; math lab and a roof top play area. We were renting a space for our middle school site for about four years, but recently our

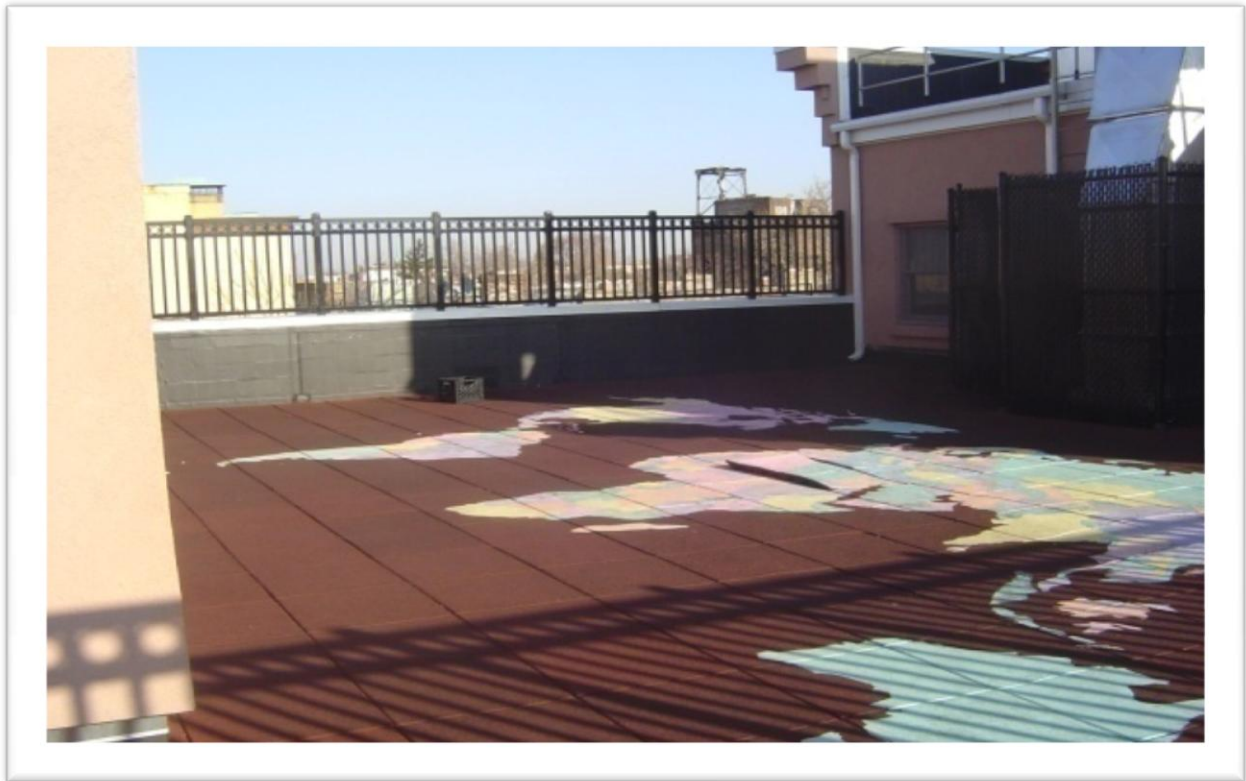
principal arranged to purchase a building closer to our elementary building. The students are really happy to be out of trailers and in a brick and mortar structure. The two sites together have 40 classrooms. Now that we have two sites, we have more opportunities to fine tune our new facilities and allow our students more enriching experiences. They will learn to be more inquisitive and to be able to conduct research and find answers independently. We began elective classes for our sixth-, seventh- and eighth- grade classes. We offered Photography, Aviation, Graphic Design, Art Studio and Culinary Arts. All of this new space and the opportunity to be creative in curriculum planning a rooftop garden play area seemed like a good thing.



Children will learn to make healthy choices about what they eat and how they spend their time. Confident, successful leaders are blossoming in classrooms and communities where kids understand that their ideas are respected and valued.

National Gardening Association - 2011

Our Roof Top Play Space



The Roof Top Play Space at our School.

The elementary school has a wonderful roof area set aside as a play space. The roof area is secured all around with decorative iron bars for the safety of the children. There is a wonderful view of the rooftops of the city and visitors can see the Hudson River and lower Manhattan.

School environments can set the stage for success or can create a necessary obstacle that negatively affects children. All environments should be designed to support the multifaceted needs of children.

Our rooftop area has a wonderful electronic multi-player video game on one end and on the other side a map of the world painted on the floor. We deserve and can have more! What if we decorated certain areas of the roof play space with container gardens of flowers and vegetables? That's how I presented my plan to our principal. How could she not agree? I believed the rooftop of our building could be beneficial in producing a small crop of produce to educate our students and enrich their lives and palates. A rooftop garden play space would allow students to have recess in a space we could also use as a meeting room in warm weather. Not only would we have a garden where young students could learn about the growing cycles of plants, they would also be able to harvest and consume the plants they grew. Starting a new entrepreneurial program for our students would be a natural progression.



The entrance onto our roof area.

Why a Children's Garden?



“Through gardening we enhance all aspects of children’s educational, social and physical development.” The National Gardening Association (NGA)

In discussions with our students it was evident that many of our inner city children have had little exposure to the variety of plants and gardens that exists. Stores that sell fresh produce in their community are a rarity. In contrast, inexpensive fast food restaurants can be found on almost every corner. Bodegas that sell a wide range of “junk food” are prolific. This makes it more difficult for our kids and their families to choose to eat more healthfully.

Due to the fact that fresh fruit is hard to find and expensive, many parents shy away from this healthier option due to financial constraints. As we started this project we also were very aware of First Lady Michelle Obama’s initiative to help children become healthier. Mrs. Obama’s initiative, “Let’s Move”, focuses strongly on children eating in a

healthy way and having a consistent exercise program. Her efforts have spotlighted the issue of obesity in children and have offered strategies and tools have been suggested that allows communities to utilize and explore ways to change the trajectory for our children. Our first lady's commitment to healthy eating has even changed things at the White House with the inclusion of a fruit and vegetable garden. School children in the vicinity have assisted her in creating and maintaining the garden and they have even come back to the White House to harvest the produce.

We felt it was important for our students to realize that our garden initiative was in sync with various communities throughout the country. Our students have great respect for President and Mrs. Obama. They have written several letters to them in which they have shared their feelings, thoughts and desires. There are two letters and photographs from the Obamas, one from the president in our front entrance and one in the office from Mrs. Obama, over the principal's desk.



“School Gardening engages students by providing a dynamic environment to observe, discover, experiment, nurture and learn. School gardens are living laboratories where interdisciplinary lessons are drawn from real life experiences, encouraging students to become active participants in the learning process.”

www.kidsgardening.org

Psychological Developmental: The 5 and 6 year old child

We targeted kindergarten and first graders because we know that young children learn better from interaction with concrete materials rather than only from books and workbooks. A good early childhood education program creates a foundation that provides an environment rich in materials that children can manipulate. A good program is often organized according to interest areas where small groups of children can work for extended periods of time. Research shows that school and classroom environments can set the stage for success. Environments should be designed to support the multifaceted needs of children.

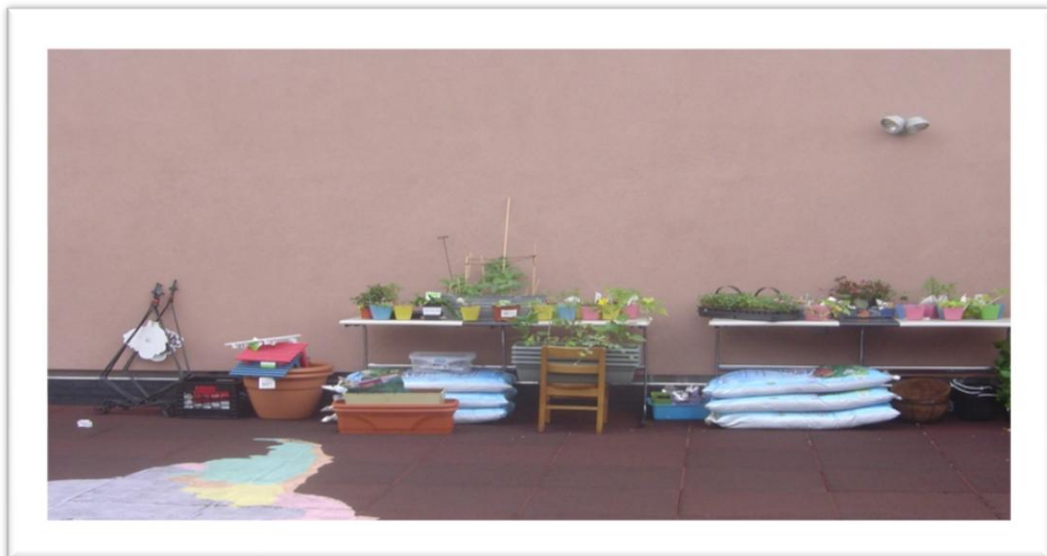
Children tend to be optimists as well as pragmatists. Young children are concerned with how things work, and the way they work. It is an age at which doing, making and building are all important. They are beset by the urge to sew, cook, and bake; they want to build things, make things and put things together. Such activities have to compete with less challenging pastimes, such as computer games, television and organized group activities. For kindergarteners and first graders the world is a new and exciting place full of things to experience and learn about

It is important to have a “nature area” with plants which offers a variety of wonderful learning experiences. Children can observe and learn about how things grow and change. Children will also measure the plants and notate their growth or the lack of it than draw and write about what they observe. They will compare and contrast the growth of different plants as their garden develops and progresses. In this area, children will develop skills in science, math concepts as well as language and they will have the

satisfaction that comes from growing and caring for living things. (*Elkind, A Sympathetic Understanding of the Child, Birth to Sixteen, 1994*).

Over the course of this thematic unit many experiments were conducted that enabled children to conduct the research themselves at five and six years old. We felt it was important for kids to understand that they could research things that were unfamiliar to them and determine the answers themselves. It was important for our students to understand that much of their knowledge and learning would depend on their actions and their quest for answers. They, in fact, were given the opportunities to gather information and learn firsthand throughout this project. Experiments were conducted by each class. The students conducted observations, recorded data, graphed the results, analyzed the data and drew conclusions.

Not only do we have a garden where young students learn about the growing cycles of plants, they will be able to harvest and consume the plants they grow.



“A school garden is a great way to teach children about caring for plants. It shows how fruits and vegetables grow, and promotes healthy eating!” National Gardening Assoc.



The National Garden Association reports the benefits of school gardens include:

- ✓ Significantly increase science achievement scores
- ✓ Improved environmental attitudes, especially in younger students
- ✓ Improve life skills, including working with groups and self-understanding
- ✓ Improved nutritional knowledge and vegetable preferences
- ✓ Improved attitudes toward social skills
- ✓ A positive impact on student achievement and behavior

For all the reasons above, I believe this project will be an asset to our school community.

Roof Top Garden Play Space

I recently read an article called “Promoting Healthy Living” from the California Department of Education. In the section called “Nutrition in the Community Garden,” they make the observation that, “The use of gardens in teaching nutrition has become a most frequent practice.” They discuss the importance of teaching how vital fruits and vegetables are to provide the nutrients children need to grow. They also discuss the origins of foods and making healthy choices by trying new healthy foods. Students also learn the skills to grow their own food offering a potential lifetime of fresh food. I agree with Joan Dye Gussow, Professor Emerita of Nutrition Education at Teachers College - Columbia University, who said, ‘Take the children to the garden and let them graze.’”



“Kids get to witness and participate in the magic. They participate in the whole cycle of food.” *Susanne Guillette, T C Today magazine, Spring 2011*

The Edible Schoolyard NYC, is located in P.S.216 in Gravesend, Brooklyn. They are partnering with Teachers College on a kitchen and garden-themed curriculum that

will enable children to enhance their learning in areas such as math, reading and art. Christiane Baker, the organizational director of the Edible Schoolyard NYC believes that it is par for the course for a woman (and an organization), whose mission is to teach that food isn't just a commodity appearing on our plates. I feel we can easily integrate all four of these areas into our thematic unit on the garden.

“Instead of the old slogan, Reading, Writing and Arithmetic, we want to change it to, Eating, Reading, Writing and Arithmetic.” (Christiane Baker, The Edible Schoolyard NYC.)

The community aspect of the Edible Schoolyard garden has been particularly positive, Baker says, bringing together students, teachers, parents and people from the neighborhood. Families from Italy, the Ukraine and Yemen have offered both recipes and crop suggestions, based on their cultural heritage.

Baker is working to open four more Edible Schoolyards, one in each borough, to showcase how an “edible education” can truly be integrated into the fabric of the New York City’s public schools. In addition to bringing an interdisciplinary garden and kitchen classroom to each of these schools, the new schoolyards will also serve as resource centers for teachers, principals and school groups, to experience and learn firsthand the benefits of an edible education.”



Photo: Google

“Not only are families reconnecting over food, but parents are eager for cooking classes and nutritional advice”.(*Christiane Baker, T C Today, Spring 2011*)

Mike Metallo, President of the National Gardening Association (NGA) relived his visit with first lady Michelle Obama at the White House. He was invited there to take part in the second-year installation of the newly expanded White House Kitchen Garden along with Secretary of Agriculture Tom Vilsack and Health and Human Services Secretary Kathleen Sebelius. This would be the first White House food garden since Roosevelt.

“We talked about how much the first lady believed in gardening as a tool to engage children in a healthier lifestyle. She views gardening as an integral part of her “Let’s Move” initiative to raise a healthier generation of kids.”

When Mike starts talking about youth gardening programs, it’s hard not to get excited. That’s because, like the first lady, he recognizes that youth gardening programs represent a tremendous opportunity for children to

understand and explore the natural world as well as learn firsthand the benefits of growing, harvesting and eating healthy foods. It's called the people-plant connection and every child deserves an opportunity to have access to this relationship. Secretary Sebelius assured all of us that ketchup found in school lunchrooms across the country would no longer count as a vegetable for school lunches! It was clear to me that this administration is concerned about our young people's health. They promoted a united message that this generation of young people deserves an opportunity to live and be healthy through diet and physical activity.

The fact that this message was delivered in the shadow of the White House kitchen garden, with young people actively engaged in planting, clearly indicates that gardens and school gardens in particular, are major components of the first lady's action plan. Youth gardening is seen as an integral part of the total solution to the health crisis affecting young people in this country. This administration appears to be serious about the implementation of school garden programs nationwide.

From the USDA's People's Garden Initiative on which the NGA serves as part of the advisory group to the Department of Health's focus on what children are being served for school lunch, to the first lady's Child Development Council's efforts to promote the eating of healthful fruits and vegetables, to the first kitchen garden initiative, our young people, more than at any time in recent

years, have a fighting chance to really thrive to be healthier and more physically fit.



Michelle Obama harvesting plants from the White House garden with Native American Children. (US Department of the Interior; Photo: Google.)

Planning and Preparation:

Piaget believed educators must plan a curriculum that enhances their students' logical and conceptual growth.

“The principal goal of education in schools should be creating students who are capable of doing new things, not simply repeating what other generations have done.” Piaget (1896-1980).

He believes that curriculum should be centered on the child's knowledge and interests. Students should have the opportunity to construct their own knowledge and have the opportunity to document their work in numerous ways. Our first step was setting our goals.



Classroom A/ A kindergarten class science fair exhibit.

We planned to solicit the support of our parents and vendors by asking them to assist us by donating some of the items needed. We asked for their assistance with the planting and design of our garden. We developed a donation letter and distributed it to the two participating classes. We planned to distribute the letter at our next parent /teacher meeting. We asked our parents to assist us in transferring the plants to the roof for the summer. We were not sure when the transfer of the plants to the roof should occur, so we asked a few experts and received many different answers. We consulted the almanac and found out that it would be safe after Mother's Day.



We realize that learning is an interactive process. It should also be interdisciplinary. Children **do not** learn most effectively in an isolated manner. We have created a theme - based program that includes:

Science - Seed and plant study

Math – Graphing, measuring, estimating

Language Arts – Vocabulary, journaling, and reading

Art – Creating Papier-mâché pots, designing covers for garden journals, paper flower gardens, painting birdhouses, garden T shirts

Resources used for this project:

Teachers needs:

Diagram of the rooftops
 A landscape consultant to help plan the roof area.
 A guardian to maintain the rooftop in July.
 A water source on the roof
 Outdoor benches

Materials:

Hose
 Rain barrel
 Soil /Fertilizer
 Starter cups / trays
 Containers for planting
 Hanging baskets

Plants:

Start from seed and /or small plants.

Tomatoes	Cilantro
Basil	Lettuce
Squash	Cucumbers
Radishes	Broccoli
Cauliflower	Pumpkins
Edible flowers	Flowering plants

Our plan was to have students plant seeds in papier-mâché pots they will design, create and decorate in art class. Then they would use these plantings to create green areas in the garden play space on the roof. We would invite all teachers to use the garden in their curriculum and have their classes involved with the maintenance and upkeep. Everyone would be included and feel a part of this initiative. Several formal experiments would occur. It was my hope that students would develop keen observation skills that would continue to progress and develop. I feel strongly that these skills would help children not only in this thematic unit, but crossover as they continue to develop literacy, mathematical and design concepts.

Community Charter Gardens

Journal Entries:

The Community Charter Garden Playground has been approved. We are on our way. I found three teachers who were eager to work with me on the project: Classroom P, a kindergarten classroom; Classroom R, a first grade classroom; Classroom S, a second grade classroom. Our committee was formed and we were all excited about this new project. We agreed to meet and develop our plans. Here are summaries of the meetings:

The Art room – Feb.10, 2011

I began by thanking them for taking on this project and sharing with them my vision for the roof. We went up on the roof and walked the area. We talked about hanging window boxes: Would they work or not on the safety rails along the top of the wall? Would the window boxes obstruct the play area? Would they be high enough so as not to attract the attention of the students? We have a large area to cover and we have to be careful not to just fill up the space, but to also allow room for the students to play. Teacher R talked about her experience last year with her class planting flowers with representatives from Home Depot. She spoke about how helpful they were. She would be willing to get in touch with them again this year. Teacher S told us about her experiences planting with the class last year, she spoke about the challenges she encountered. As she related her problems, we discussed how we could work to avoid repeating them. Teacher P wanted to make sure we kept this an exciting project for the children. We discussed ways to make this a concrete learning experience. We all agreed that the children would learn by doing and we would help them document this experience as much as possible.

I handed out floor plans of the roof so that everyone could start to develop ideas and we could sit down and map out the final floor plan of our play space. We surfed the internet to research child centered gardening information. We found the National Gardening Association's site: (the benefits of school gardens/kidsgardening.org) where there was a wealth of information including plans and research on children's gardens. We also found information about grants to help support our plans for the garden. We all agreed that we needed to find out what kind of budget the Community Charter School was willing to provide. We also agreed to meet again in one week and share more ideas about the roof garden.

Classroom R- A first grade classroom - Feb.24, 2011

We began our brainstorming session. We discussed more about what we would plant and what containers we would use. Teacher R suggested that we use egg shells to start the seedlings; she had read an article stating that the shell contains nutrients that would help the seedlings grow. All we would have to do is put a little soil in the shells. It would also be easy to transplant the sprouted seed by simply placing the egg shell in soil and watering it. Teacher P suggested that we plant the sprouts in glass baby food jars. She felt the students would be able to see the roots grow as well as the sprouts. We all began to think about collecting recyclable items for the project.

We found a "Gardening with Kids" catalog, from the National Gardening Association and we began to look through it and consider our choices. We found a product that used newspaper to construct small containers that could be used to start the seedlings. They were biodegradable so you could plant them wherever you wanted no

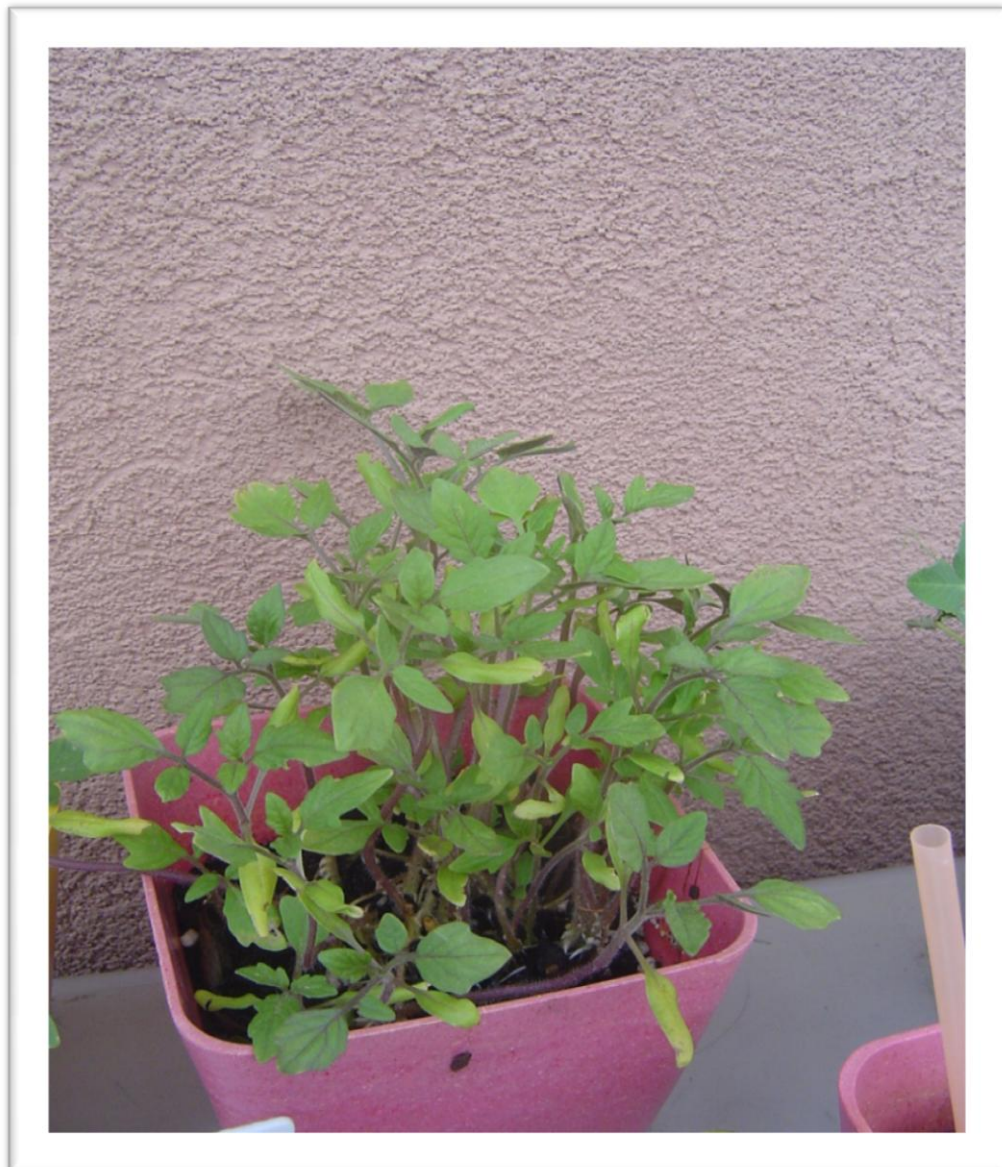
repotting and environmentally correct. We decided to use them for all the reasons we stated.

We had a request from another kindergarten teacher to be included in the project. Teacher A wanted to participate with her class. The teachers all wanted to plant peas and beans because they have a short gestation period. This way, students would not have to wait a long time to see the sprouts bloom. We decided to research what other plants sprouted quickly so that we could have a more varied selection of items in the garden. I reminded them that this is a garden playground and we also needed flowers. We pledged to collect jars for the classes to begin their planting.

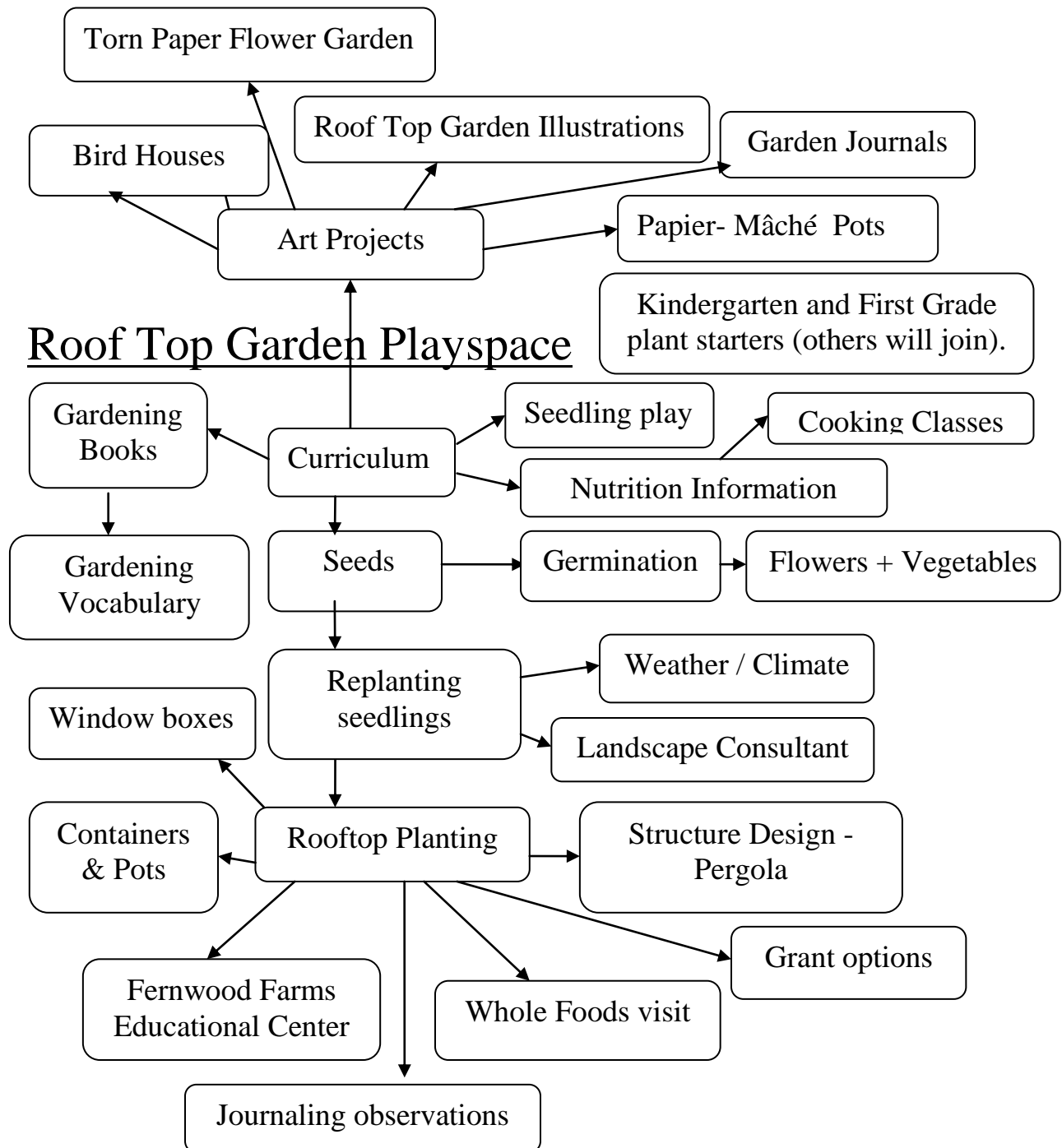
Principal's Office - February 28, 2011

We met with our principal to discuss some of the items we needed. We found a small group of books on children's gardens in the Gardening with kids catalog along with books on how to prepare lessons in many different facets of gardening: rallying support, funding, recruiting volunteers, developing the garden site and composting. The principal did not give me a budget; however, she did ask me what we needed. She allowed us to purchase a few. I was able to secure two strawberry pots and starter newspaper pot maker. I also purchased a small library of gardening books; *Botany on Your Plate*, by Katherine D. Barrett, 2008; *The Growing Classroom*, by Roberta Jaffe and Gary Appel, 2007; *Math in the Garden*, by Jennifer M. White, Jaine Kopp, Christine Manoux and Katherine D. Barrett, 2006; *Growing Food*, Isobel R. Contento, Angela Calabrese Barton, 2007; and *The White House Garden and How It Grew* by Robbin Gourley, 2008. The school invested \$200 in these supplies.

After looking on many gardening grant web sites, we found an opportunity to apply for a grant that would help our garden for this year. The grant is called “Yes to Carrots” and is sponsored by The Seed Fund and Whole Foods. They will award \$2000 seed fund grants plus a \$500 starter garden grant to schools. We followed the instructions and hoped for the best, but we were not successful in getting the grants.



Our principal required that we develop a thematic map for this new curriculum.



We worked collaboratively to develop the map and included all of the information.

The committee agreed to meet on March 3rd to discuss our new equipment and when we would start planting. We spoke with our librarian about creating a small gardening section in a corner of our school library with existing books along with our new books.

Art Room- March 3, 2011

We spoke more about the new equipment and books. We decided to ask for assistance from Home Depot. In the spring of 2010 two landscapers from the local store came in the spring to work with the first graders. We wrote a letter and sent it to Home Depot. Teacher R came with a copy of last year's letter. We updated the information, had the letter reviewed and signed by our principal and dropped it in the mail at the end of our meeting.

Classroom lesson plans included readings from a few new books we ordered from Amazon, the titles include, *What's Your Favorite Flower*, by Allen Fowler; *Planting a Rainbow*, by Lois Ehlert, and *Redoute: The Man Who Painted Flowers*, by Carolyn Croll. *Planting a Rainbow* was the first book read to Mrs. Rivera's class. The students told me about this book when they came to art class later. They seemed to be really interested in the process of planting. The objectives of this lesson were (1) to have the students learn about the life cycle of seeds, plant and flowers, (2) to be able to identify things that plants need to grow and (3) to be able to identify flowers by their colors. They started with a seed study: Students were shown different kinds of seeds (bean, corn, pea, sunflower, squash and tomato). They drew pictures of the seeds and made other observations. They were asked to predict what the seed would grow to become.

Students brainstormed in class, they created a KWL chart (What we know, what we want to know and what we Learned) by making a list of all the student's ideas about what plants need to grow. They narrowed the components down to four things: water, food, light and air. After completing *Planting a Rainbow*, we brought many different types of flowering and nonflowering plants into the classrooms for children to examine and explore. Children photographed the plants. They also described what they saw. Each plant was placed on a separate table and children chose the plant they wanted to investigate and illustrate. As they drew, careful attention was paid by the children as they focused on the different parts of the plants they captured in their illustrations. We observed children carefully examining the stem, the leaves, the petals, and in some cases, the roots if visible in clear plastic cups. They shared their drawings and compared the similarities and the differences that existed. All student illustrations were made into the pages of a book for their classroom.

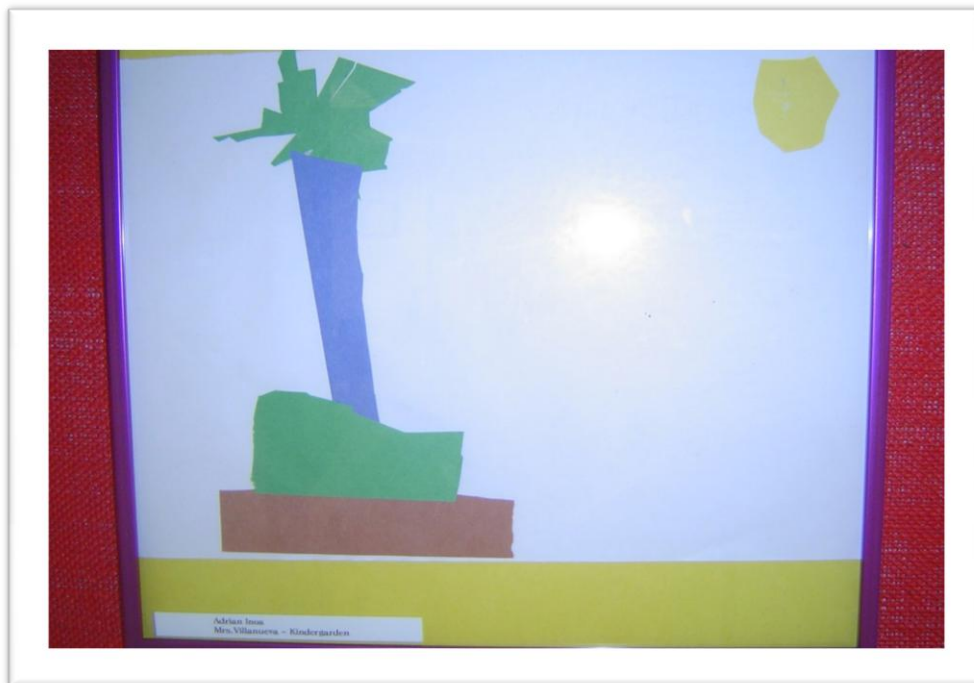
Art room - March 8, 2011

In art class we worked on Torn Paper Flowers. Students were able to create a picture with a floral design using construction paper, glue and their imaginations. Pictures of flowers were placed on the board as well as around the room. Children were given basic supplies: drawing paper, scraps of color construction paper and glue sticks. They were asked to tear the color scraps into different shapes to form different parts of a flower: flower petals, stems, leaves, etc.

The torn paper pieces were glued onto the drawing paper. As the illustrations were finished, they were framed and displayed in the room, then moved to the hallway in front of the office on display.



A composition from a student in Classroom R / A first grade class.



A composition from a student in Classroom V / A kindergarten class.



These seedlings were grown by Classroom R / a first grade classroom. They are gathering sunlight in the science room.

Planting Begins! - March 10, 2011

The time had come for planting. We created individual garden journals for each student in the classrooms working on the project. At the time of planting, each child was given the opportunity to document their research in their own personal journal. The journal consisted of a blank book with a hard cover. They received the book with the title on top “My Gardening Journal” and their first and last name printed on the bottom. Initially children discussed things that they might include on their covers. When other classrooms saw the journals they became interested in having books made available for their garden projects. A list was created by teachers documenting the children’s ideas before they began their artwork. Children were encouraged to create an illustration that depicted their vision of the garden using their imaginations and creativity. The

illustrations were not graded. Students had the opportunity at meeting time to share their covers and describe their visions for the garden.

Teacher R said she would be planting sometime this week if we had the containers ready. Teacher P was also ready to begin this journey. All containers were ready and I had the time to assist the classes in this endeavor.



These gardening journals are set up for classroom R. They are beginning to create their cover designs.

March 15, 2011

Classroom R planted today, we used the science room and the teachers led the lesson about putting a few seeds into soil and adding just enough water to start them growing. Plants were left in the science room until the beginning of the next week. Then students took their plants back to their classroom; they talked to them, watered them and cared for them. The plants really seemed to respond. The leaves began to sprout and the stems were tall, growing up to the light.

Classroom P planted later on that week. They chose to plant in their room, just after lunch. I was unable to be there to assist with the planting in this class so I visited the classroom at the end of the day. The students were a bit perplexed with the realization that they planted in Styrofoam cups and for some reason holes were put in the cups, all around the sides and in the bottom. Water leaked from the cups onto the table because no one had thought to place the cups in a container that would hold the water. Water and soil were all over the table and had to be cleaned up. One student responded to our questions regarding the problem and he suggested that we put the cups “inside another cup with no holes.”



Seed starting containers.....

Most classes were asked to decorate their cups before we planted.

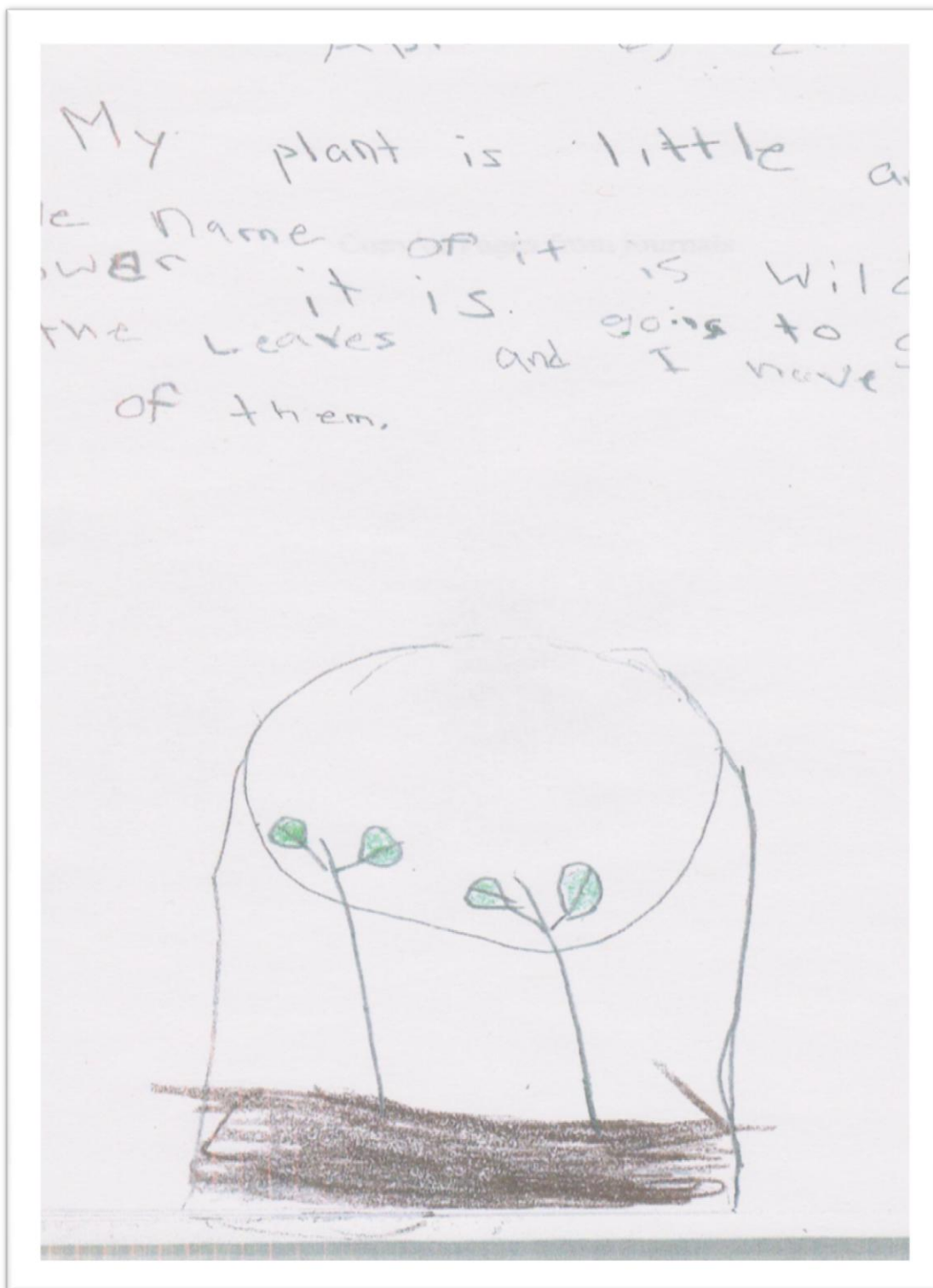




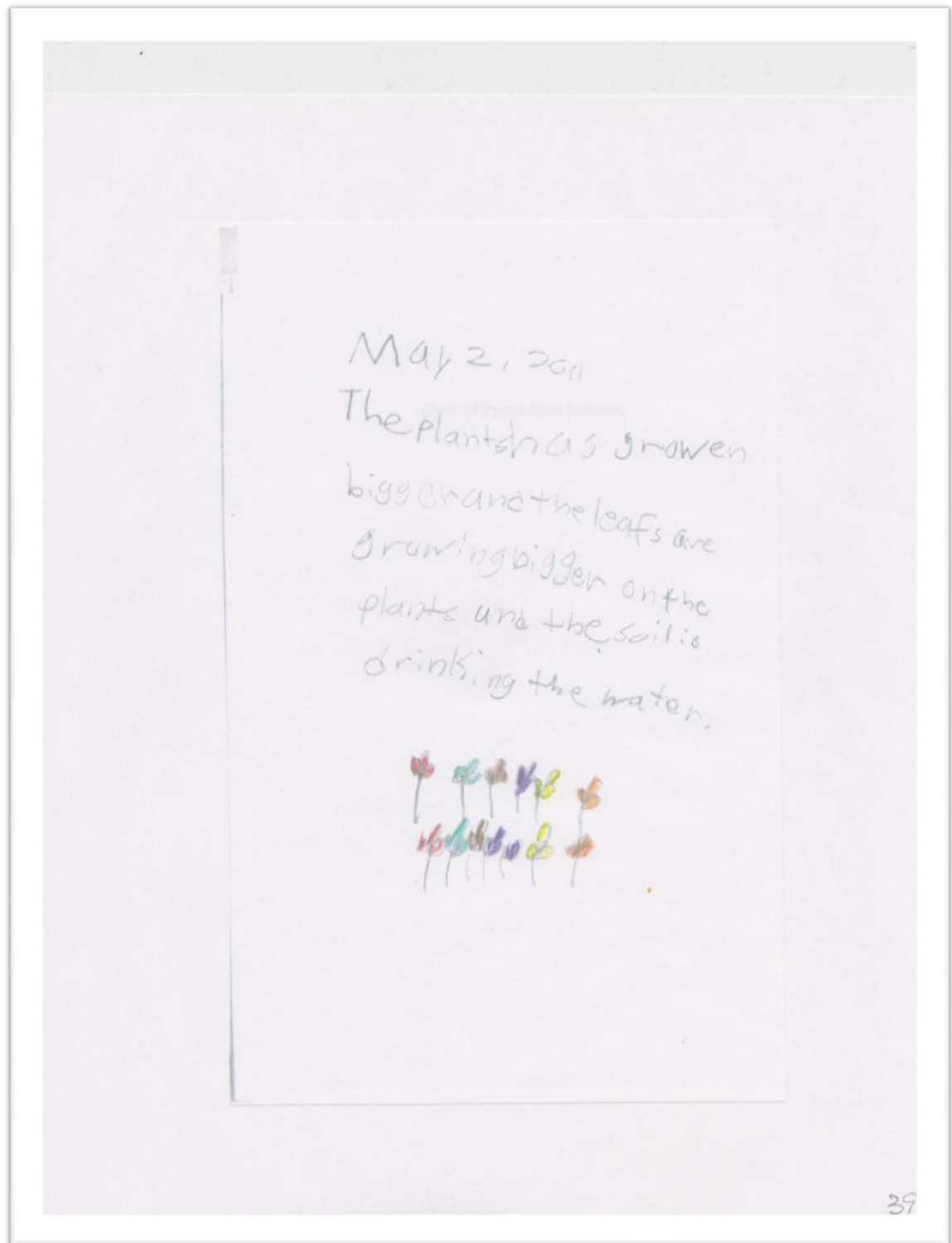
Glass jars were used to better observe plant growth.

Classroom P - March 17, 2011

Students were encouraged to write their observations or dictate them to teachers. These were included as journal entries in personal journals. Students shared their journal entries with their peers and teachers formally at meeting time or informally throughout the day. They were also able to share their journal entries with their families and discuss the findings. Through their work, students were able to clearly determine that plants needed sunlight. Students also drew pictures of the three plants using drawing tools of their choice to document what had occurred. Documentation was an important element of this work. At the end of this experiment students were able to show significant and purposeful conclusions based on their research.



Journal entry – Classroom A / Kindergarten class.



Journal entry – Classroom R / First grade class.

Art Class - March 24, 2011

We started talking about our gardens and this time we discussed what a rooftop garden should look like. As the children talked, I wrote their thoughts on the board. They were given large pieces of white drawing paper, pencils, scissors and a stencil in the shape of a T- shirt. They were asked to place the stencil on top of the paper and trace the stencil. Then they used scissors to cut out the shape by following the pencil line they created. They were asked to create an illustration of a rooftop garden on the T- shirt using the criteria we discussed from the notes on the board. Once the pencil work was sketched onto the shirt, they were able to choose crayons, color pencils or markers to complete the composition. The completed shirts were displayed on the bulletin board across from the office.



Classroom R / First Grade - March 31, 2011

We took the plants up to the science room where they could get more sunlight so that the plants would grow taller. Students in classroom R and classroom P began their journals and checked on their plants throughout the week. I checked on the plants on Fridays just to make sure that they had enough water to make it through the weekend, I noticed that the growth of the plants in the classrooms took off, while many of the seeds in the science room did not grow very well at all. It appeared that the plants enjoyed being around the students in their classroom more than just having them visit.

April 7, 2011

The classes conducted an experiment centered on a plant's need for water. Two very similar plants were selected; one was watered daily while the other received no water at all. The plant where no water was provided quickly died while the plant that received constant watering grew and flourished. Children were given the responsibility for watering the plant and they took this responsibility very seriously. Once again, children were given opportunities to observe and document their observations before drawing conclusions. To do this they wrote about their observations and drew pictures of what they saw. A large experience chart was created to document the children's observations in writing. The children's charts supported the conclusion that water was an essential element to the growth of a healthy plant.

April 14, 2011

Another experiment classes conducted involved three plants that were the same size and species. One plant was put in a box with no light available; one plant was put in a box with a hole cut out of one side that provided light; and one plant was placed in a box that was completely exposed to sunlight. Children were able to observe that the plant with no light quickly died. They also observed that the plant with adequate light flourished and the plant with the hole cut out of the box showed the plant growing toward the sunlight.

April 21, 2011

I brought in a few multicolored pots, in different sizes, to repot the plants that have survived. I must admit, they are starting to really look good. The students were very pleased with the way the plants had grown. We placed the plants in the science room where they were able to get sun and the students would be able to water and view them so that they could continue to record the information in their journals.



Gardening in schools across the U.S. has become increasingly popular because of the advantages it brings students of all ages.

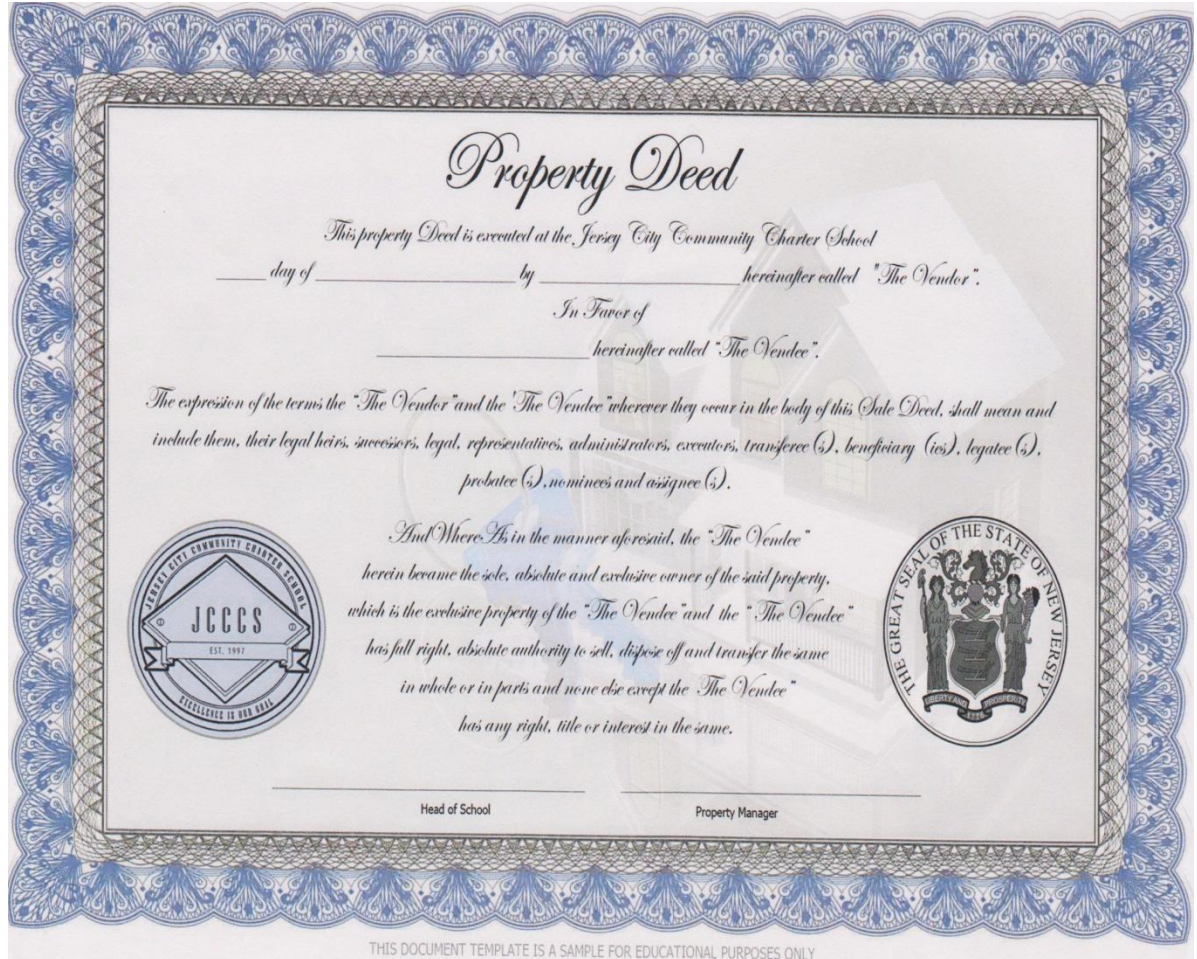
National Gardening Association

May 5, 2011

We reevaluated the papier-mâché project and replaced it with a birdhouse project. Who wouldn't want to have birdhouses in their garden? We purchased the kits and constructed them. We needed a place to store the constructed houses until we could start painting them. Our only option was to hang the birdhouses on the walls of the art room. All displayed work should have some sort of heading or title so we came up with the idea of mounting them on the wall in small clusters and placing a sign in each area that said Condos for Sale. Students from the upper grades who were testing in my room seemed very interested and asked about purchasing a birdhouse. I explained that they were for our kindergarteners and first grade classes because they were doing the planting for the garden. They seemed a little disappointed so we spoke to our principal and purchased additional birdhouses to sell to students and parents who were interested. All sales went to the materials needed for the creation of our garden on the roof. We sold the unpainted houses for \$5; this also included paint or markers to decorate the house.



Condos for sale!!



We knew that we would need to give receipts for purchases. We wanted to be able to give something just a little different. We came up with the idea of giving a deed for the property; when you buy a house that's what happens, so we decided to make this a teaching moment. Each house was sold with a deed to show ownership of the property. Parents seemed pleased that the students were learning about buying property. Some talked about buying or wanting to buy their first house.

We arranged to paint our birdhouses in the science room because it was a larger space to move around. We provided only primary colors of acrylic paints (red, blue and yellow) and assisted the students in mixing any secondary colors they wanted. The students seemed to enjoy this project and they were very successful in their efforts to decorate their houses. Students were very happy with their houses and everyone wanted to take their birdhouses home.



“Decorative bird houses help to invite and protect birds, while adding aesthetic appeal to any landscape of gardens.” yardenvy.com



Classroom R was the first group to paint.



Students knew what colors they wanted to use & how they wanted their houses to look.



Classroom R's Condo Court



Completed bird houses are packed and ready for delivery.



“Our mission: To renew and sustain, through educational initiatives, the essential connection between people, plants and the earth by promoting environmental stewardship, the science of gardening, cross curricular learning and health and wellness in schools and communities nationwide.”

The National Gardening Association - 2011

Reflective Summary

“I hear and I forget, I see and I remember, I do and I understand.” This quote by Confucius is as pertinent today as it was in the past. It correlates to the research within the educational community. It lays the groundwork for experiential learning and the project based approach. Research for decades bears out that children learn most effectively through hands on exploration and discovery provided in concrete ways. We recognize that this type of learning will stay with the child for the rest of his/her life. Additionally the child will be able to apply knowledge when necessary.

Throughout the thematic unit on the garden it was evident that our students seriously took on the role of researchers. Through concrete hands on activities, children

observed, gathered and recorded data which they analyzed and later drew conclusions. Throughout these explorations teachers took on the role of facilitators and assisted children throughout the process. As you observed the pedagogical staff work with children, it was evident that their skills were simultaneously developing, as they began to ask open ended questions that promoted deeper investigations and higher level thinking.

“A community that learns, exists to help members better understand their experiences, deepen what they know, and learn more about what they don’t know.”

Giselle O. Martin-Kniep, Communities that learn, lead and last.

It was rewarding to witness some of my colleagues who previously felt that all significant learning had to come from them, stepping back and realizing that truly formidable learning comes from children’s own discoveries and explorations. Not only were children total engaged in the process, but one could also see them applying their new knowledge and skills throughout this thematic unit.

Robert Starratt (“Leaders with Vision”, 1995) mentions these elements among his theories of leadership:

- **Leadership emerges out of a vision of what the leaders and their colleagues can accomplish.** (Starratt, 1995)

Our principal believed in our vision and entrusted us with the task of broadening this new theme that would empower our students with new hands on learning experiences, new skill building opportunities and the ability to learn and grow with pride and dignity, as our school pledge states. We put our heads together, we accomplished a great deal. We have opened new parameters that we believe will make a difference in the

lives of our students and families. We are building new curriculum that will create new, exciting cross subject content, and a hands on curriculum that will include growing a garden, marketing and selling produce. This thematic unit opens up new goals and dreams for our teachers and students.

- **Leadership involves a communal articulation of the vision that captures the imagination and enthusiasm of the members.** (*Starratt, 1995*)

It was also evident that teachers heightened their ability to share ideas and insights as they planned collaboratively. Additionally throughout the process teachers continuously reflected on the work children were doing, and the direction of the thematic unit. They were consistently challenged to come up with new ideas and share their strategies, methods and techniques with their colleagues. This enhanced the pedagogy for each staff member involved. Teachers were also encouraged to take risks and to refocus on our common vision for our school and this thematic unit. It was also important for teachers to communicate that their children's authentic work was valued not only by their peers, but by the adults in the school. As we fine tuned our activities teachers became more comfortable in creating opportunities for children to become self directed learners and were able to integrate mathematics, science, social studies and literacy into this thematic unit.

- **Leadership leads to the continuous renewal of the institution through periodic restructuring of the vision.** (*Starratt, 1995*)

It is our hope that this year's work will provide a springboard to expand this project and take it to the next level, in many new directions. We look forward to the continuation of this thematic unit; however it will depend on the commitment from pedagogical staff and administration as well as the interests of students. I believe that this

is just the beginning and together we can make it better. We have enough space, teacher collaboration, and the approval of our administrative team, to move forward. Next year we will plan for raised beds of some kind on the roof. While looking for new ideas we found some nice photographs of Pergolas, small outdoor rooms with slat roofs. We have found plans online and put together a team of co-workers willing to help set one up.

I look forward to field trips to:

- The Children's Garden at the Bronx Botanical Garden- An experience for students to be exposed to a real working children's garden.
- The Fernbrook Farms Educational Center - A resource where students will have a professional environmental educator to guide us through farm study activities.
- Whole Foods Market – We can take a tour of the store to learn about how fresh produce is bought, transported and handled for purchase by every day shoppers.
- An open air market – To see how fresh produce is brought in from small farms and how they band together and sell to the public.
- To find a chef from a local restaurant, and have them come in and work with our students and maybe visit the restaurant to make and enjoy a meal.

Bibliography

Arthur N. Applebee, “Curriculum as Conversation, Transforming Traditions of Teaching and Learning.” 1996, University of Chicago Press.

David Elkind, “A Sympathic Understanding of the Child - Birth to Sixteen”, third edition, 1994, Allyn and Bacon.

Robin Gourley, “First Garden, The White House Garden and How It Grew”, 2011, Clarion books

Suzanne Guillette, “ Giving Peas a Chance, *Christiane Baker got interested in food when her mom stopped cooking. Now she’s a leader in garden-based nutrition education for kids*, T.C. Today, Spring, 2011 Teachers College, Columbia University.

Alfie Kohn, “The Schools Our Children Deserve, Moving Beyond Traditional Classrooms and Tougher Standards”, 2000, Houghton Mifflin Company.

Giselle O. Martin – Kniep, “Communities that Learn, Lead and Last, Building and Sustaining Educational Expertise”, *Facilitating, Assessing and Sustaining Professional Learning Communities*, 2008, John Wiley and Sons, Inc.

Fran McManus, “Garden State on Your Plate, New Jersey farmers and chefs head back to school for some taste filled lessons”, Edible Jersey, Celebrating Local Foods of the Garden State, Season by Season, Spring, 2011.

Michelle Obama, “American Grown, The Story of the White House Kitchen Garden and Gardens Across America”, 2012, The National Park Foundation, Crown books.

Donald A. Schon, “The Reflective Practioner, How Professionals Think In Action”, *The Art of Managing: Reflections within an Organizational learning System*, 1983, by Basic Books, Inc.

Danielle Sherry, “Pretty Enough To Eat”, *A container filled with assorted edibles can be just as attractive as a pot of posies*, Container Gardening, Fine Gardening Magazine, Vol. 8, 2011, The Taunton Press, Inc.

Robert J. Starratt, “Leaders with Vision, The Quest for School Renewal”, *A New Vision of Theory of Leadership, The Empowering Covenant*, 1995, Corwin Press, Inc.

Steps To A Bountiful Kid’s Garden, 2011, National Gardening Association.

Appendix

Karolyn A. Crutchfield

12 South Mountain Avenue Apt.14 Montclair, New Jersey 07042
Cell / 201-320-5272 Home / 973-746-1743
kcrutchfield@comcast.net

Jersey City Community Charter School
128 Danforth Avenue
Jersey City, N.J. 07305

Dear Mrs. Goldston,

As you know, I am currently a student at Bank Street College, completing my Master's degree in Leadership in Technology and the Arts. As part of my graduate work, I am writing an Independent Study, a requirement for my degree and a culmination of my studies. For my project, I have chosen to create a roof top garden play space. This space can be used by all students in the building as a laboratory for gardening and ecological studies, an area for plant study as well as an opportunity to learn about healthy eating. Our gardening project will expand our basic plant study curriculum to a higher level beginning with our kindergarten and first grade students. In order to develop this new curriculum, I will be engaging the students in discussions, acquiring new books for the library, creating more extensive lessons and performing more hands on projects with plants and gardens. I will be asking the children to take part in documenting their findings in journals that will be available in the classroom and creating hands on projects that can be used to highlight the on-going work and to exhibit for our parents and the community. I plan to document this project by photographing the students at various stages of the project. Together, these will serve as the primary data for my study. Every individual will be given a pseudonym and any identifying features will be disguised. The school and the classroom will also be given pseudonym.

In order to use the written and photographic documentation, I need your permission. Please fill out the attached Consent Form and return it to me by ____.

The study that results from this project will be shared as a PDF with the Bank Street community in a password-protected searchable database and may also be submitted as a PDF to the Bank Street Library where it would be catalogued as part of the Library collection and entered into an international database for wider circulation. The material may also be included in professional presentations and publications.

If you have any questions about this project, please do not hesitate to contact me.

Thank you in advance for your consideration.

Sincerely,

Karolyn Crutchfield

Consent Form

I understand that Karolyn Crutchfield, Master's Degree candidate at Bank Street College of Education, is studying the development of a roof top garden play space and will be using the school as a laboratory for the project of her Master's Thesis. Every individual will be given a pseudonym and any identifying features will be disguised. The school and the classroom will also be given pseudonym.

The study that results from this project will be shared as a PDF with the Bank Street community in a password-protected searchable database and may also be submitted as a PDF to the Bank Street Library where it would be catalogued as part of the Library collection and entered into an international database for wider circulation. The material may also be included in professional presentations and publications.

I agree to give permission for this study and the use of this school in the study.

Signed:

Date:



JERSEY CITY COMMUNITY CHARTER SCHOOL

128 Danforth Avenue – Jersey City, N.J. 07305
(201) 433 – 2288 - Fax: (201) 433 – 5803

Dear Parents,

My name is Karolyn Crutchfield and I am a graduate student in Leadership in Technology and the Arts at Bank Street College of Education in New York. I am in the process of completing my Master's Degree, and I have chosen to create a roof top garden play space. This space can be used by all students in the building as a laboratory for gardening and ecological studies, an area for plant study as well as an opportunity to learn about healthy eating. Our gardening project will expand our basic plant study curriculum to a higher level beginning with our kindergarten and first grade students. In order to develop this new curriculum, I will be engaging the students in discussions, acquiring new books for the library, creating more extensive lessons and performing more hands on projects with plants and gardens. I will be asking the children to take part in documenting their findings in journals that will be available in the classroom and creating hands on projects that can be used to highlight the on-going work and to exhibit for our parents and the community. I plan to document this project by photographing the students at various stages of the project. Together, these will serve as the primary data for my study. Every individual will be given a pseudonym and any identifying features will be disguised. The school and the classroom will also be given pseudonym. The study that results from this project will be shared as a PDF with the Bank Street community in a password-protected searchable database and may also be submitted as a PDF to the Bank Street Library where it would be catalogued as part of the Library collection and entered into an international database for wider circulation. The material may also be included in professional presentations and publications.

In order to use the written and photographic documentation, I need your permission. Please sign and return the attached form to confirm your consent.

My Sincere Thanks,

Karolyn Crutchfield



JERSEY CITY COMMUNITY CHARTER SCHOOL
128 Danforth Avenue – Jersey City, N.J. 07305
(201) 433 – 2288 - Fax: (201) 433 – 5803

Consent Form

I understand that Karolyn Crutchfield, Master's Degree candidate at Bank Street College of Education, is studying the development of a roof top garden play space and will be using the school as a laboratory for the project of her Master's Thesis.

I agree to allow my child to participate in this study.

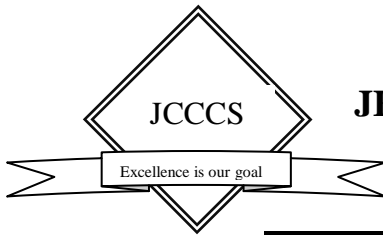
Name of Child (please print): _____

Signature (parent / guardian): _____

I agree to give permission for my child's written work and photographic representation to be used in this study.

Name of Child (please print): _____

Signature (parent / guardian): _____



JERSEY CITY COMMUNITY CHARTER SCHOOL

128 Danforth Avenue - Jersey City, N.J. 07305

(201) 433 – 2288 - Fax: (201) 433 – 5803

Dear Parents and Caregivers,

Spring is here! We are starting a garden on our rooftop playground.

Students will still be able to have recess and the school will have a new outdoor meeting room when the weather gets warm. We engaged a group of kindergarteners and first graders to start the garden by planting seeds, we will use these seedlings to create a garden area on the roof.

“No activity better links young people to food and nature than gardening. The garden experience bonds youngsters to the cycles of life and teaches them to understand where their food comes from. Is there any greater satisfaction – or “greener” activity – a child can experience than smelling a flower from his or her own garden, plucking a carrot from the ground, or digging new potatoes from warm soil? What can make parents happier than hearing their child tell them they want chard for dinner?” Mike Metallo, National Gardening Association President

Not only will we have a garden where our students can learn about the growing cycles of plants, they will also learn the skills to grow their own food, offering a lifetime of potential fresh foods.

We need your help to make our garden a success, we want to fill in with other plants, pots, creative containers, a rain barrel, a hose, watering cans, plant bulbs, Scott’s organic soil, plant fertilizer and benches.

All donations will be greatly appreciated!

Sincerely,

K. Crutchfield
Rooftop Garden Playground Committee

Carletta Martin Goldston
Head of School


JERSEY CITY COMMUNITY CHARTER SCHOOL

128 Danforth Avenue - Jersey City, N.J. 07305

(201) 433 – 2288 - Fax: (201) 433 – 5803

March 25, 2011

Mr. Chris Lejieu
 Manager
 Home depot
 440 Route 440
 Jersey City, New Jersey

Subject: Rooftop Garden Playground

Dear Mr. Lejieu,

Jersey City Community Charter School believes in a hands-on approach to learning. We offer thee hands-on experiences to support our curriculum. As a community school, we are committed to fostering ties with businesses in our area. We are hopeful that you will be able to help us meet our objectives by participating in this new school project.

We feel that it would be a wonderful benefit to our students to be able to use the playground area on our roof to learn more about planting a garden. We would like to have flowers and vegetables so that they can actually see the growth process and produce food that they will be able to eat and enjoy. Lesson plans are being developed and we need to be advised as to what should work and what might not be viable. We will be working with kindergarteners and first graders to begin to set up the garden. Our goal is to include other grades as they do their plant study lessons.

We would appreciate any support you can give us this year in terms of materials (printed materials suitable for 5, 6 and seven year old children, soil containers, seeds, bulbs, etc.) as well as in-person expertise. Last year you sent two experts who really energized the first grade students. They became instant celebrities! We hope that by showing enthusiasm for this field and sharing their knowledge, they might inspire even more students to follow in their career path.

I thank you in advance for your consideration.

Sincerely,

K. Crutchfield
 Rooftop Garden Playground Committee

Carletta Martin Goldston
 Head of School



JERSEY CITY COMMUNITY CHARTER SCHOOL

128 Danforth Avenue - Jersey City, N.J. 07305

(201) 433 – 2288 - Fax: (201) 433 – 5803

Yes to Carrots

(Application essay for a garden grant)

Our Jersey City Community Charter School has a wonderful roof area set aside as a playspace. There is a wonderful multi-player game up there and also a map of the world painted on the floor. We deserve and can have more! What if we accented the area with a garden of flowers and vegetables? Well, that is how I presented my plan to our principle, how could she not agree. I believe the rooftop of our building can be beneficial in producing a small crop that educates our students and enriches their lives and palates. Besides, this could be a lot of fun!

I proposed we create a rooftop garden playground at our elementary school, at our Danforth Avenue site. Students could still have recess and we could have a new meeting room to be used in warm weather. Not only do we have a garden where young students learn about the growing cycles of plants, they will be able to harvest and consume the plants they grow. With some time, a little luck and hard work we may even have enough produce to sell to the parents, which could be a new entrepreneur program for our curriculum, marketing and retail selling.

With this new program, we would engage a group of young students (kindergarteners and first graders) to plant seeds and use these plantings to create a garden area on the roof. I would invite other teachers to use the garden in their curriculum and have all classes involved with the maintenance and watering of the garden. Each class could plant one item so that everyone would be included and feel apart of this exercise. We will create and/or decorate pots as well as purchase pots to achieve our goal. We will ask our parents and vendors to help us out by donating some of the items we need, and also by helping with the planting and design work.

I recently read an article called “Promoting Healthy Living” from the California Department of Education. In the section called” Nutrition in the Community Garden,” they make the observation that “The use of gardens in teaching nutrition has become a most frequent practice.” They discuss the importance of teaching how important fruits and vegetables are to provide the nutrients children need to grow, the origins of foods, making healthy choices by trying new foods. Students also learn the skills to grow their own food, offering a lifetime of potential fresh food. I agree with Joan Dye Gussow, Professor Emerita of Nutrition and Education, ‘Take them to the garden and let them graze.’”

I look forward to having some of the produce used in our café to spice up our lettuce and cucumber salads with tomatoes and herbs, on Friday's. If all goes well, I look forward to creating an entrepreneurial program that would teach the students how to open a store, stock the shelves and do some business, by selling produce to our parents.

"No activity better links young people to food and nature than gardening. The garden experience bonds youngsters to the cycles of life and teaches them to understand where their food comes from. Is there any greater satisfaction – or "greener" activity – a child can experience than smelling a flower from his or her own garden, plucking a carrot from the ground, or digging new potatoes from warm soil? What can make parents happier than hearing their child tell them they want chard for dinner?" Mike Metallo, Nation Gardening Association President.

Sincerely,

K. Crutchfield
Rooftop Garden Playground Committee

Carletta Martin Goldston
Head of School

Cut Paper Flowers



Subject: Art

Standard: 1.1 the Creative Process

Strand: D. Visual art

1.3P.D.1 – Demonstrate the safe and appropriate use and care of art materials and tools.

1,3.P.D.6 – Create more recognizable representations as eye hand coordination and fine motor skills develop.

Question: *How do we create a cut flower arrangement without going to a florist or the supermarket?*

Objective: Students will create a floral picture with construction paper, glue and their imaginations.

Procedure:

Time: 1 Class period

Supplies:

Stick glue

Pencils

Scissors

Drawing paper

Construction Paper Scrapes

Students will be reminded what flowers look like by reviewing photographs of flowers and we will discuss the parts of a flower. They will be asked to create different kinds of flowers with the paper and the tools provided. As the flowers or bouquets are completed, they will be framed and displayed in the halls of the school.

Bird Houses



Subject: Art

Standard: 1.1 The Creative Process

Strand: D. Visual art

1.3P.D.1 – Demonstrate the safe and appropriate use and care of art materials and tools.

1,3.P.D.6 – Create more recognizable representations as eye hand coordination and fine motor skills develop.

1.1.5.D.1 – Identify elements of art and principles of design that are evident in everyday life.

Question: What would your house look like?

Objective: Kindergarteners and first graders will paint with tempura paints to decorate a bird house they can use in their gardens at home or donate to the school garden.

Procedure:

Time: 1 Extended class period

Supplies:

Tempura Paints – All colors in small containers on each table.

Brushes – Two Brushes (One wide, One Tiny).

Container of water for cleaning brushes between colors.

Students will be asked to decorate their houses with acrylic paints. All bird houses will be delivered with a deed stating that the property legally belongs to the student.

Rooftop Garden T-Shirts



Subject: Art

Standard: 1.1 The Creative Process

Strand: D. Visual Art

1.3P.D.1 – Demonstrate the safe and appropriate use and care of art materials and tools.

1,3.P.D.6 – Create more recognizable representations as eye hand coordination and fine motor skills develop.

1.1.5.D.1 – Identify elements of art and principles of design that are evident in everyday life.

Question: How would you design your rooftop garden?

Objective: Students will design a cityscape and incorporate rooftop gardens in their illustrations.

Procedure:

Time: 1 Class period

Supplies:

Drawing paper (T-shirt shape)

Pencils

Crayons / Markers

Students have visited the roof of our building where our garden will be. They will talk about what a cityscape is and seen pictures. We will discuss the facts about rooftop gardens that make them different from gardens on the ground. Illustrations will be drawn onto t-shirt shaped paper and hung on a clothes line in the art room.

